Appl. No. 10/505,397 Amdt. Dated April 11, 2008 Reply to Office action of January 11, 2008 Attorney Docket No. P16309-US1

EUS/J/P/08-3103

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

1. (Previously Presented) A method of dynamically re-allocating a

frequency spectrum to a plurality of radio networks (RNs) in accordance with a

predefined spectrum allocation scheme, wherein a spectrum resource has previously

been allocated to each RN or group of RNs comprising:

generating an electronic spectrum request for a RN or a group of RNs, wherein

the spectrum allocation scheme is based on spectrum credits assigned with the RN or

group of RNs, the spectrum credits relating to elementary spectrum units and being

exchangeable into spectrum resources; and

transmitting the electronic spectrum request via a communications network to a

server infrastructure which also receives electronic spectrum requests for other RNs,

the server infrastructure processing the received electronic spectrum requests in

accordance with the spectrum re-allocation scheme and in accordance with the

spectrum allocation scheme to reallocate the spectrum resources to the plurality of RNs.

2. (Original) The method of claim 1, wherein the re-allocation is

performed continuously or wherein the re-allocation is performed quasi-continuously.

3. (Previously Presented) The method of claim 2, further comprising

determining a service quality of one of the RNs taking into account the actual or

predicted traffic on the RN's spectrum resource and generating the electronic spectrum

request in dependence of the service quality.

4. (Previously Presented) The method of claim 3, wherein the whole

frequency spectrum is re-allocated.

Page 2 of 11

Appl. No. 10/505,397 Amdt. Dated April 11, 2008 Reply to Office action of Jan

Reply to Office action of January 11, 2008

Attorney Docket No. P16309-US1

EUS/J/P/08-3103

5. (Previously Presented) The method of claim 3, wherein only a portion of the frequency spectrum is re-allocated and wherein the portion of the frequency spectrum to be re-allocated is taken from the individual RNs' spectrum resources according to a predefined contribution scheme.

6. (Canceled)

- 7. (Previously Presented) The method of claim 1, wherein each RN or group of RNs is assigned the same or an individual first number of spectrum credits and wherein an electronic spectrum request for an RN comprises a specification of a second number of spectrum credits representative of the requested spectrum resource.
- 8. (Previously Presented) The method of claim 7, wherein the communications network allows to reassign the spectrum credits among the plurality of RNs.
- 9. (Previously Presented) The method of claim 8, wherein the spectrum credits have a limited temporal validity.
- 10. (Previously Presented) The method of claim 9, wherein the spectrum re-allocation scheme is auction-based and wherein the electronic spectrum requests comprise electronic bids submitted via the communications network.
- 11. (Previously Presented) The method of claim 10, wherein the electronic bids relate to one or more frequency bundles comprised within the frequency spectrum and wherein a specific frequency bundle is re-allocated to the RN associated with the best electronic bid.
- 12. (Previously Presented) The method of claim 11, wherein, prior to the next re-allocation process for all RNs, the specific frequency bundle or a part thereof re-

Appl. No. 10/505,397 Amdt. Dated April 11, 2008 Reply to Office action of January 11, 2008 Attorney Docket No. P16309-US1 EUS/J/P/08-3103

allocated to the RN or group of RNs associated with the best electronic bid is allocated to another RN or group of RNs.

13. (Original) The method of claim 10, wherein the frequency spectrum to be re-allocated is partitioned bid-proportionally.

14. (Previously Presented) The method of claim 13, wherein the electronic bids are submitted iteratively.

15. (Previously Presented) A computer program product for dynamically re-allocating a frequency spectrum to a plurality of radio networks (RNs) in accordance with a predefined spectrum allocation scheme, wherein a spectrum resource has previously been allocated to each RN or group of RNs, comprising program code portions for:

generating an electronic spectrum request for a RN or a group of RNs, wherein the spectrum allocation scheme is based on spectrum credits assigned with the RN or group of RNs, the spectrum credits relating to elementary spectrum units and being exchangeable into spectrum resources; and

transmitting the electronic spectrum request via a communications network to a server infrastructure which also receives electronic spectrum requests for other RNs, the server infrastructure processing the received electronic spectrum requests in accordance with the spectrum re-allocation scheme and in accordance with the spectrum allocation scheme to reallocate the spectrum resources to the plurality of RNs.

16. (Canceled)

17. (Previously Presented) A system for dynamically re-allocating a frequency spectrum to a plurality of radio networks (RNs) in accordance with a predefined spectrum re-allocation scheme, wherein a spectrum resource has previously been allocated to each RN or group of RNs, comprising:

Appl. No. 10/505,397 Amdt. Dated April 11, 2008 Reply to Office action of January 11, 2008 Attorney Docket No. P16309-US1

EUS/J/P/08-3103

a communications network;

at least one RN infrastructure with one or more RNs, means for generating an

electronic spectrum request, wherein the spectrum allocation scheme is based on

spectrum credits assigned with the RN or group of RNs, the spectrum credits relating to

elementary spectrum units and being exchangeable into spectrum resources, and

means for transmitting the electronic spectrum request via the communications network;

and

a server infrastructure in communication via the communications network with

the at least one RN infrastructure, the server infrastructure having means for receiving

electronic spectrum requests and means for processing the received electronic

spectrum requests in accordance with the spectrum re-allocation scheme and in

accordance with the spectrum allocation scheme to re-allocate the spectrum resources

to the plurality of RNs.

18. (Previously Presented) The system of claim 17, configured as an

electronic auction network.

19. (Previously Presented) A server infrastructure for dynamically re-

allocating a frequency spectrum to a plurality of radio networks (RNs) in accordance

with a predefined spectrum re-allocation scheme, wherein a spectrum resource has

previously been allocated to each RN or group of RNs, comprising:

means for receiving electronic spectrum requests in communication via a

communications network with at least one RN infrastructure, wherein the spectrum

allocation scheme is based on spectrum credits assigned with the RN or group of RNs,

the spectrum credits relating to elementary spectrum units and being exchangeable into

spectrum resources; and

means for processing the received electronic spectrum requests in accordance

with the spectrum re-allocation scheme and in accordance with the spectrum allocation

scheme to re-allocate the spectrum resources to the plurality of RNs.

Page 5 of 11

Appl. No. 10/505,397 Amdt. Dated April 11, 2008 Reply to Office action of January 11, 2008 Attorney Docket No. P16309-US1 EUS/J/P/08-3103

20. (Previously Presented) A radio network (RN) infrastructure utilizing a previously allocated spectrum resource, comprising:

at least one RN; and

a device for generating an electronic spectrum request and for transmitting the electronic spectrum request via a communications network to a server infrastructure which also receives electronic spectrum requests for other RNs, wherein the spectrum allocation scheme is based on spectrum credits assigned with the RN or group of RNs, the spectrum credits relating to elementary spectrum units and being exchangeable into spectrum resources, the server infrastructure processing the received spectrum requests in accordance with a predefined spectrum re-allocation scheme and the spectrum allocation scheme to re-allocate a spectrum resources to the at least one RN.